Applicant: Moungi G. Bawendi et al. Attorney's Docket No.: 14952.0274 C1D1/ MIT Case 8096

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REMARKS

Claims 1, 26 and 37 were amended. Support for the amendment can be found throughout the specification, for example, p. 14, lines 25-28. Claims 1-3, 12-13, 26, 27, 31-33, and 37-39 are pending.

Applicants thank the Examiner for withdrawal of the rejections under 35 U.S.C. § 112 and under 35 U.S.C. § 102(e) to U.S. Patent No. 6,096,496 to Frankel ("Frankel"), 35 U.S.C. § 103(a) as being unpatentable over Frankel in view of Dabbousi et al., 1997, (CdSe)ZnS Core-Shell Quantum Dots: Synthesis and Characterization of a Size Series of Highly Luminescent Nanocrystallites, *J. Phys. Chem. B*, 101:9463-9475 ("Dabbousi"), and 35 U.S.C. § 103(a) as being unpatentable over Frankel in view of U.S. Patent No. 6,927,069 to Weiss et al. ("Weiss").

Priority

The Examiner contends that the disclosures of earlier Application Nos. 09/160,458 and 60/101,046 "fail to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. § 112 for one or more claims of this application. Neither U.S. application 09/160,458 nor provisional application 60/101,046 teach alloys. Therefore the priority date for the presently claimed inventions is September 17, 1999 (i.e., filing date of 09/397,432)." Office Action at 3. Applicants respectfully disagree. Applicants have amended claims 1, 26 and 37 to remove the term "alloys" from the claims. The benefit of the priority of earlier Application Nos. 09/397,432, now U.S. Patent No. 6,602,671 (filed September 17, 1999), 09/160,458, now U.S. Patent No. 6,617,583 (filed September 24, 1998) and 60/101,046 (filed September 18, 1997) is respectfully requested.

Rejection under 35 U.S.C. § 102(e)

Chee

The Examiner has rejected claims 1-3, 12-13, 26-27, 31-33 and 37-39 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,544,732 to Chee et al. ("Chee"). See Office Action at 5. Claims 1, 26 and 37 are independent.

The claims are entitled to the claim of priority to U.S. Patent Application Serial No. 09/160.458, filed on September 24, 1998. This date precedes the filing date of Chee which is

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May 20, 1999. Accordingly, Chee is not prior art. Applicants request reconsideration and withdrawal of the rejection.

Weiss

The Examiner has rejected claims 1-3, 12-13, 26-27, 31-33 and 37-39 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,207,392 to Weiss et al. ("the '392 patent"). See Office Action at 5. The Examiner argues that "the semiconductor nanocrystal can be encased in glass or the semiconductor nanocrystals can be within pores of carriers (i.e. support)." See Office Action at 6. Applicants respectfully disagree. Claims 1, 26 and 37 are independent.

The specification defines a "solid support" as "an insoluble material to which compounds are attached during a synthesis sequence" (see page 28, lines 8-9 of the specification). The specification further provides examples of solid supports as including pellets, disks, capillaries, hollow fibers, needles, pins, solid fibers, cellulose beads, pore-glass beads, silica gels, polystyrene beads optionally cross-linked with divinylbenzene, grafted co-poly beads, polyacyrlamide beads, latex beads, dimethylacrylamide beads optionally crosslinked with N--N'-bisacryloylethylenediamine, and glass particles coated with a hydrophobic polymer (see page 28, lines 14-19 of the specification).

The '392 patent does not describe a support associated with more than one population of semiconductor nanocrystals. The glass coating described in the '392 patent is associated with one nanocrystal only, not with more than one population of semiconductor nanocrystals (see the '392 patent at col. 7, lines 26-31). Unlike the claimed support, the glass coating in Weiss does not provide a material to which compounds are attached but provides a surface on the nanocrystal that will readily associate with the linking agent (see the '392 patent at col. 7, lines 18-36). In other words, the coating described in the '392 patent is not a support.

Furthermore, the Examiner refers to the semiconductor nanocrystals that can be within "pores of carriers" and these carriers are considered supports (see Office Action at 6). Applicants respectfully disagree that the carrier is a support. Additionally, semiconductor nanocrystals that can be within "pores of carriers" is not supported in U.S. Patent No. 5.990,479 to Weiss et al. ("the '479 patent") which has the effective filing date of November 25, 1997. Indeed, the '479 patent makes no mention of pores of carriers, only the '392 patent mentions

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such (see the '392 patent at col. 14, lines 21-40). The claims as amended claim priority to U.S. Patent Application Serial No. 09/160,458, filed on September 24, 1998. This date precedes the filing date of the '392 patent which is March 1, 1999. Accordingly, the semiconductor nanocrystals that can be within pores of carriers is not in the '479 patent, the disclosure is not considered prior art.

Thus, Weiss does not disclose all elements of claims 1, 26 and 37. Accordingly, claims 1, 26 and 37, and the claims which depend therefrom are not anticipated by Weiss. Applicants respectfully request reconsideration and withdrawal of this rejection.

CONCLUSION

In light of the foregoing amendments and remarks, Applicants respectfully submit that all requirements for patentability are met and ask that all claims be allowed. Please apply any charges or credits to deposit account 19-4293.

Respectfully submitted,

Date: August 5, 2010

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